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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/068,052	04/29/1998	KIYOTAKA KOIDE	9319S-000063	1911

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EXAMINER

TON, MINH TOAN T

ART UNIT PAPER NUMBER

2871

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/068,052

Applicant(s)

KOIDE, KIYOTAKA

Examiner

Toan Ton

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,12 and 15-44 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,4-7,18-20,27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-12, 15-17, 21-26, 29-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *newly added/amended limitations in the claims* filed 01-31-03 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Remarks

2. It is kindly requested that Applicant points out the relevant portions of the specification which discloses/teaches all *added/amended limitations* in the response filed 01-31-03. No new matter should be entered.

Claim Objections

3. Claim 39 is objected to because of the following informalities: “an insulating film overlapping...” in the last paragraph (lines 9-13) should appear before “a pixel electrode...” in a third paragraph (lines 4-8). The necessary changes need to be made because “the insulating film” is recited before “an insulating film”. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

4. Claims 8-10, 16, 21-23, 29, 31-32, 37-38, 39-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujikama et al (US 5719647).

Fujikama discloses (see Figure 3) a liquid crystal display device comprising : a pair of substrates 14, 15; a liquid crystal layer 21 sandwiched between the substrates; a wiring layer having a first conductive layer 7 (first electrode) formed on at least one inner surface of one of the substrates; an insulator 8 formed on the lower electrode 7; an upper electrode 11 formed on the insulator; an insulating film 16 having a contact hole 10 formed on a surface of the wiring layer; a pixel electrode 9 connected to the wiring layer through the contact hole of the insulating film (i.e., the pixel electrode having a region in which no insulating film overlaps the pixel electrode).

Fujikawa discloses/shows (Figure 3) the insulating film comprising portions not overlapping the connection portion and an area of the pixel electrode which extends from the connection portion, i.e., portions at the contact hole (here, absence of portions of the insulating film, i.e., the pixel electrode having a region in which no insulating film overlaps the pixel electrode). Here, Figure 3 shows the insulating layer disposed underneath an end portion of the pixel electrode, an underside of a central portion of the pixel electrode being free of the insulating layer, and the central portion of the pixel electrode extending from the connection portion.

Fujikawa discloses insulating film 16 having materials such as acrylic resin.

Every liquid crystal display device has a driving circuit disposed on at least one of the substrates.

Claim Rejections - 35 USC § 103

5. Claims 11-12, 15, 17, 24-26, 30, 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujikama as applied to claims 8-10, 16, 21-23, 29, 31-32, 37-44 above.

Fujikama discloses a MIM device comprising the first conductive layer 7, the insulating layer 8 and the upper electrode 11 (i.e., the upper electrode is integrally formed with the wiring layer). It would have been obvious to one of ordinary skill in the art to form the upper electrode separately from the wiring layer since it has been held obvious to make things (elements) separable.

Adhesive layers are common and known in the art provide adhesion/reinforcing means between layers. Therefore, it would have been obvious to one ordinary skill in the art to employ adhesive means, as common and known in the art to yield advantages such as providing adhesion/reinforcing means between layers.

An electrode coupled the pixel electrode connecting to the wiring layer is common and known for advantages such as reducing connection-resistance. Therefore, it would have been obvious to one ordinary skill in the art to employ adhesive means, as common and known in the art to yield advantages such as reducing connection-resistance.

Insulating film (with contact holes) employ shading characteristics is known in the art for advantages such as preventing light-leakage. Therefore, it would have been obvious to one ordinary skill in the art to employ adhesive means, as common and known in the art to yield advantages such as reducing connection-resistance.

Response to Arguments

6. Applicant's arguments filed 04-24-03 have been fully considered but they are not persuasive.

Applicant's arguments are as follows : Fujikama fails to disclose the insulating film not overlapping the connection portion and another area of the pixel electrode, the another area extending from the connection portion. Fujikama shows the entire pixel electrode overlapping an insulating film 17.

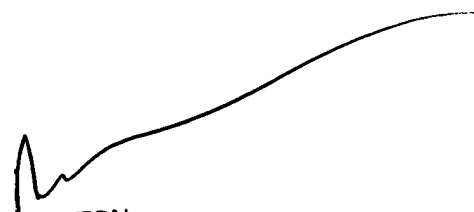
Examiner's responses to Applicant's arguments are as follows : Fujikawa discloses/shows (Figure 3) the insulating film 16 (not the second insulating film 17) comprising portions not overlapping the connection portion and an area of the pixel electrode which extends from the connection portion, i.e., portions at the contact hole (here, absence of portions of the insulating film, i.e., the pixel electrode having a region in which no insulating film overlaps the pixel electrode). Here, Fujikawa discloses/shows in Figure 3 the insulating layer disposed underneath an end portion of the pixel electrode, an underside of a central portion of the pixel electrode being free of the insulating layer, and the central portion of the pixel electrode extending from the connection portion. Also, shown in Figure 3 is a substantial portion of a top surface of the pixel electrode extending from the connection portion and being free of all insulating material.

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Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. TON whose telephone number is (703) 305-3489. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

May 21, 2003



TOANTON
PRIMARY EXAMINER